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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,185	10/24/2003	Paul David Metcalfe	CRUI/0007	2601

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WILLIAM B. PATTERSON
MOSER, PATTERSON & SHERIDAN, L.L.P.
Suite 1500
3040 Post Oak Blvd.
Houston, TX 77056

EXAMINER

COLLINS, GIOVANNA M

ART UNIT	PAPER NUMBER
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3672

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/693,185

Applicant(s)

METCALFE ET AL.

Examiner

Giovanna M. Collins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 and 40-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 and 40-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20040308, 20041115
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-24 and 40-42 in the reply filed on 10/5/05 is acknowledged.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-7, 14, and 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by D'audifferet et al. 2,933,137.

D'audifferet discloses (fig. 9 and 11) a downhole filter comprising a tubular member (30) having a wall defining a plurality of openings (32), at least a portion of the opening having an outer width less than an inner width.

Referring to claim 2, D'audifferet discloses the outer width (at 32) defines the minimum width of the opening.

Referring to claim 3, D'audifferet discloses said outer width (at 32) is located on an outer circumference of the tubular member.

Referring to claim 4, D'audifferet discloses the opening (at 32) has a keystone form.

Referring to claims 5-6, D'audifferet discloses the opening is capable of being created by laser-cutting or abrasive water jet cutting. Applicant is reminded that even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) (see MPEP 2113). Therefore the feature using laser cutting to create the opening is given no patentable weight.

Referring to claims 7, D'audifferet discloses the opening (32) is in the form of a slot and extends longitudinally of the tubular members

Referring to claim 16, D'audifferet discloses A method of filtering wellbore fluids, the method comprising: placing downhole filter (see fig. 1) within a wellbore, the downhole filter comprising a tubular member (30) defining at least one opening (32), at least a portion of the opening having an outer width less than an inner width; and passing wellbore fluids (fig. 3) into an interior passage of the tubular member through the opening.

Referring to claim 17, D'audifferet discloses sizing the outer width of said opening to filter wellbore particulate matter of a predetermined diameter (col 3, lines 74-75).

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4. Claims 1-5,8,14,18,20 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Gryskiewicz 4,343,358.

Gryskiewicz discloses (fig. 2 and 4) a downhole filter comprising a tubular member (22) having a wall defining a plurality of openings (14), at least a portion of the opening having an outer width less than an inner width.

Referring to claim 2, Gryskiewicz discloses the outer width (at 14) defines the minimum width of the opening.

Referring to claim 3, Gryskiewicz discloses said outer width (at 14) is located on an outer circumference of the tubular member.

Referring to claim 4, Gryskiewicz discloses the opening (at 14) has a keystone form.

Referring to claim 5, Gryskiewicz discloses the opening created by laser cutting (fig. 3).

Referring to claims 8, Gryskiewicz discloses the opening (32) is in the form of a slot and extends circumferentially of the tubular members.

Referring to claims 18, 20, and 24, Gryskiewicz discloses a downhole filter arrangement comprising a tubular member (22) having a plurality of laser cut perforations (14) having an outer width less than an inner width.

5. Claims 15,18-20, and 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Chupka et al. 4,901,417.

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Referring to claims 15,18-19 and 23, Chupka discloses (fig 6 and 8) a downhole filter comprising a metal tubular member (50) having a wall defining a plurality of openings (at 52) having a serpentine configuration (52) that is laser cut (col. 6, lines 16-20).

Referring to claim 23, Chupka disclose the outer edges of the perforation have been quenched (col. 7, lines 26-28).

6. Claims 18-21 are rejected under 35 U.S.C. 102(b) as being anticipated by European patent 1152120 to Castano-Mears et al.

Referring to claims 18-21 Castano-Mears discloses (fig. 11) a downhole filter arrangement comprising a tubular member (128) made of metal having a plurality of slots (132) having capable of being laser cut with a constant width. Applicant is reminded that even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) (see MPEP 2113). Therefore the feature perforation being laser cut is given no patentable weight.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nuzman et al. 4,133,379 in view of Gryskiewicz '358.

Referring to claims 1 and 9, Nuzman discloses (fig. 1) a downhole filter comprising a tubular member (1) having a wall defining a plurality of openings (13) in the form of a slot that extend helically of the tubular member. Nuzman does not disclose opening having an outer width less than an inner width. Gryskiewicz teaches filter having opening having an outer width less than an inner width allows the filter to be self-cleaning and non clogging (col. 2, lines 48-49). As it would be advantageous to have an opening that is self cleaning and non clogging, it would be obvious to one of ordinary skill in the art to modify the filter disclosed by Nuzman to have openings having an outer width less than an inner width as taught by Gryskiewicz.

9. Claims 1 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Castano-Mears in view of Gryskiewicz '358

Referring to claims 1 and 11, Castano Mears discloses (fig. 3a-3b) a downhole filter comprising a tubular member (38) that is expandable having a wall defining a plurality of openings (46). Castano-Mears does not disclose opening having an outer

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width less than an inner width. Gryskiewicz teaches filter having opening having an outer width less than an inner width allows the filter to be self cleaning and non clogging (col. 2, lines 48-49). As it would be advantageous to have an opening that is self cleaning and non clogging, it would be obvious to one of ordinary skill in the art to modify the filter disclosed by Castano-Mears to have openings having an outer width less than an inner width as taught by Gryskiewicz.

Referring to claim 12, Castano-Mears discloses extendible portions (fig. 3b).

Referring to claim 13, Castano Mears discloses the wall of the tubular member has at least one substantially circular opening therein which opening is adapted to assume a circumferentially-extending slot form of smaller width than the original substantially circular opening, following diametric expansion of the tubular member (see figs. 3a-3b).

10. Claims 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gryskiewicz '358 in view of Chupka et al. '417

Gryskiewicz disclose the filter of claim 1 but does disclose openings are cut by a laser but does not disclose the openings have a serpentine configuration. Chupka disclose that using a laser to cut slots in a filter allows the slots to be different shapes and patterns. Moreover, a change in the shape of a prior art device is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the filter disclosed by Gryskiewicz to have a serpentine

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shaped slot as taught by Chupka because a change in the shape of a prior art device is a design consideration within the skill of the art

11. Claims 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Donnelly '6,315,040 in view of Gryskiewicz '358

Referring to claims 40-41 Donnelly discloses (fig. 3) a downhole filter comprising a tubular member (1) that is expandable having a wall defining a plurality of openings (7) and a deformable filter sheet (3) having perforations (6) around the exterior of the tubular that is expandable. Donnelly does not disclose opening having an outer width less than an inner width. Gryskiewicz teaches filter having opening having an outer width less than an inner width allows the filter to be self cleaning and non clogging (col. 2, lines 48-49). As it would be advantageous to have an opening that is self cleaning and non clogging, it would be obvious to one of ordinary skill in the art to modify the filter disclosed by Donnelly to have openings having an outer width less than an inner width as taught by Gryskiewicz.

Referring to claim 42, Donnelly discloses the perforations (6) are capable of being laser cut.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Collins '152, Smith '675, Carroll '804 and Lillie '743 all disclose filters with opening having an outer width less than an inner width.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Giovanna M. Collins whose telephone number is 571-272-7027. The examiner can normally be reached on 6:30-3 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


gmc


David Bagnell
Supervisory Patent Examiner
Technology Center 3670